AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

- 1. (Original) A method of increasing expression of GLUT4 in a subject comprising administering to the subject a GDF-8 inhibitor.
- 2. (**Original**) A method of increasing insulin sensitivity and glucose uptake by cells in a subject comprising administering to the subject a GDF-8 inhibitor.
- 3. (Original) A method of treating diabetes in a subject comprising administering to the subject a GDF-8 inhibitor.

4. (Cancelled)

- 5. (Original) The method of any one of claims 1-3, wherein the GDF-8 inhibitor is selected from the group consisting of a peptide fragment of GDF-8, a dominant-negative mutant of GDF-8, a GDF-8 receptor antagonist, a non-GDF-8 peptide, an antisense nucleic acid and a ribozyme.
- 6. (Original) The method of any one of claims 1-3, wherein the GDF-8 inhibitor is derived from mature GDF-8 protein.
- 7. (Original) The method of any one of claims 1-3, wherein the GDF-8 inhibitor is derived from the Pro domain of a GDF-8 protein.
- 8. (Original) The method of claim 2, wherein said insulin sensitivity and glucose uptake is increased by modulating the expression of a hexose transporter selected from the group consisting of GLUT4 and GLUT1

9. (Cancelled)

10. (Cancelled)

11. **(Original)** The method of claim 3, wherein the subject is suffering from type II diabetes.